1. Record Nr. UNINA9910595032803321

Autore	Rantuch Peter
Titolo	Ignition of Polymers / / by Peter Rantuch
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-13082-0
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (128 pages)
Collana	Springer Series on Polymer and Composite Materials, , 2364-1886
Disciplina	628.9223
Soggetti	Fire prevention Buildings - Protection Polymers Materials science Fire Science, Hazard Control, Building Safety Materials Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- The Correlation between External Heat Flux and Time to Ignition -- Methods of Calculation of Ignition Parameters -- Ignition Parameters of Various Polymers Comparison -- Conclusions. .
Sommario/riassunto	This book provides an overview of the initiation of combustion processes of polymeric materials. It presents physicochemical processes associated with heating as well as numerical methods for initiation parameter calculation. In addition, the book describes thermal degradation of polymers and the effect of an incident heat flux on initiation time. It then highlights the most commonly used devices for measuring the time to ignition using external heat sources. The target group of this book are scientists and researchers dealing with materials combustion and also graduates and practitioners focused on fire protection.